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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/089,195	06/27/2002	Henri Samain	13833.0013	5156

7590 12/28/2005

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1330 Connecticut Avenue N W  
Washington, DC 20036

EXAMINER
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MOORE, MARGARET G

ART UNIT	PAPER NUMBER
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1712

DATE MAILED: 12/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/089,195	<b>Applicant(s)</b> SAMAIN ET AL.	
	<b>Examiner</b> Margaret G. Moore	<b>Art Unit</b> 1712	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 December 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 12, 13, 15, 16 and 18-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 12, 13, 16 and 18-24 is/are rejected.
- 7) ☒ Claim(s) 15 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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1. Applicants' amendment has overcome the previous rejections for reasons of record. Upon an updated review of the prior art, the Examiner has unearthed a new ground of rejection. Since this rejection presently applies to claim 23 (which the Examiner had indicated as being allowable over the prior art in previous office actions) this action cannot be made final. The Examiner apologizes for this unintentional delay in prosecution.

2. Claims 20 and 21 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Reference to the group with an antibacterial effect or an antifungal effect is not further limiting since such groups are not found in claim 12.

3. For the record the Examiner notes that the cosmetic activity in R<sub>5</sub> of claim 18 is limited by the phrase on line 7 and 8 to a coloring, UV-stabilizing, antibacterial, antifungal or reducing effect. This language is not specifically found in the definition of R<sub>5</sub> but it is clear from the description of the polymer that this is what is embraced.

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 12, 13, 16 and 19 to 22 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Elfersy et al '815.

Elfersy et al. teach an ether stabilized organosilane composition which is the product from mixing an ether having a reactive -OH or carboxylic ester group and a silane. Column 16, line 15 and on, teach various silanes to be stabilized having UV protecting groups attached thereto. See also claim 15. This meets the claimed requirement of a UV stabilizing cosmetic effect.

Please note column 12, lines 20 to 33, which teach that X in the silane is “prone to react with various hydroxyl containing molecules”. This indicates that, in fact, the X groups are replaced by the hydroxy containing ether. Also please note the description of the silane product found on column 13, starting on line 50. While this shows a silane having an ammonium functional group rather than a UV protecting or stabilizing group, the product of the UV protecting group silane will be comparable to the product of the ammonium functional group silane. Note on lines 54 and on that R<sub>1</sub> includes various alkoxy groups or can be derived from a hydroxylated polymer, such as the polyether stabilizing group. Finally, note Example 2 which includes HCl in the mixture of glycol ether and silane. Such an acidic compound will serve to catalyze the reactivity of the silane X groups and the OH groups.

It is clear from a full reading of Elfersy et al. that at least some of the X groups in the initial silane compound react with the hydroxy group in the ether compound to form the stabilized silane compound.

On the one hand, instant claim 12 embraces R<sub>1</sub> and R<sub>2</sub> that are “hydrocarbon based”. Given the breadth of this term, that is the difference between “based” and a pure hydrocarbon, the ether or hydroxyl compound derived R<sub>1</sub> groups in Elfersy et al. meet the claimed R’ and R” groups, as well as a non-hydrolyzable functional group with a solubilizing function (although the reaction product between X and –OH will create an Si-O-C bond, the fact that it is a stable compound in the presence of water and the fact that the organosilanes do not undergo self-condensation<sup>1</sup> indicates that this stabilizing group is, in fact, nonhydrolyzable). Thus when all of the X groups are reacted, the silanes in Elfersy et al. anticipate the instant claims. For the amounts in claims 12 and 13, see column 12, line 53. For claims 19 to 21, note that such groups are not required by the instant claims. For claim 22, note that the breadth of the term “hair product ingredients” is so broad as to virtually be met by any additive, such as the water in the composition, any residual or unreacted polyether or the acid compound.

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<sup>1</sup> see column 8, line 34.

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On the other hand, Elfersy et al. teach various  $R_1$  groups for the final silane product. The formulas on the bottom of column 9 show the various  $R_1$  groups, albeit for an ammonium functional silane rather than a UV stabilizing silane. The skilled artisan would have found, from this general formula, the presence of one polyether  $R_1$  group in the final silane product to have been obvious. Thus one having ordinary skill in the art would have found the substitution of one of the alkoxy groups in the UV protecting silanes taught on columns 16 and 17 with a polyether group in the final product to have been obvious.

6. Claims 22 to 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Elfersy et al. '815.

Patentees do not specifically teach a method of treating hair, but they do teach the use of the silanes therein as a UV protectant, for example, in a sun tan lotion. As the skilled artisan would realize, UV protection in hair treatment products is also desirable, as exposure to UV rays from the sun can be detrimental to hair. Thus, with the knowledge that the silanes therein can be used as a UV protectant in a sun tan lotion, the skilled artisan would have realized the effectiveness thereof in hair treating products. In this manner the claimed method of treating hair is rendered obvious. Note that it is prima facie obvious to add a known ingredient to a known composition for its known function.

7. Elfersy et al. '869 and '172 are cited as being of general interest. These contain teachings similar to that found in '815.

8. Claims 15 is objected to as being dependent upon a rejected base claim, but containing allowable subject matter. The prior art fails to teach or suggest such a solubilizing group.

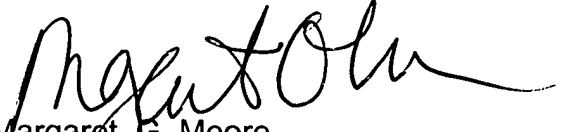
9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Margaret G. Moore whose telephone number is 571-

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272-1090. The examiner can normally be reached on Monday to Wednesday and Friday, 10am to 4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Margaret G. Moore  
Primary Examiner  
Art Unit 1712

mgm  
12/23/05